## **Claims**

## What is claimed is

- A Method for coordinating location dependent information, services, or tasks, comprising the steps of
  - deriving and refining location information of at least one user based on location measurements or proximity observations,
  - providing location information of said at least one user,
  - initiating tasks, providing information, or services dependent on said location information,

by a locator entity in a distributed system gathering said location measurements or proximity observations and aggregating said location information of said of at least one user, said locator entity restricting the accesses to said location information by further comprising the steps of

- authenticating and authorizing or trusting inquirer parties, and
- serving location information requests according to inquirer's grants wherein said grants depend on the relative location or absolute location of an inquirer or a user, an inquirer's identity, an inquirer's intention, a user's intention, time, or an information exchange contract.
- 2. The Method according to claim 1, wherein said location information is encrypted (for ensuring privacy).
- 3. The Method according to claim 1, wherein for said authenticating and authorizing or trusting cryptography techniques are applied.

- 4. The Method according to claim 1, wherein the method comprises the further step of investigating said distributed system for identifying and coordinating location information sources or inquirers' and other parties' clients.
- The Method according to claim 1, wherein said provided location information further comprises tracking information or planned location information.
- 6. The Method according to claim 1, wherein said location information is a fusion of multiple location measurements or multiple proximity observations improving the location precision and reliability.
- 7. The Method according to claim 1, further comprising the step of proactive involving a user or another party dependent on location, time, or contextual user preferences.
- The Method according to claim 1, further comprising the step of specifying the behavior of the locator entity or inquirer's grants by an authenticated and authorized party.
- A Locator Agent Unit for coordinating location dependent information, services, or tasks
  - comprising locating means for receiving and/or deriving location information and providing location information and
  - comprising means for initiating tasks or services dependent on the derived location information
  - comprising a uniform networking interface for detecting devices
    feeding location information, enabling communication with inquirers'

- and other parties' client, and allowing controlling the locator agent unit, wherein said locator agent unit comprises
- investigation means for identifying and coordinating location information sources or inquirers' and other parties' clients.
- 10. The Locator Agent Unit according to claim 9, comprising a map unit for collecting location information from said sources, aggregating said location information onto a virtual map (LocMod), and organization means for coordinating location dependent information, services, or tasks dependent on said aggregated location and depend on the relative location or absolute location of a inquirer or a user, an inquirer's identity, an inquirer's intention, a user's intention, time, or an information exchange contract..
- 11. The Locator Agent Unit according to claim 9, further comprising means for authenticating and authorizing client devices or inquirers.
- 12. The Locator Agent Unit according to claim 9, wherein said locator agent unit further comprises means for location information encryption and decryption for ensuring privacy.
- 13. The Locator Agent Unit according to claim 9, wherein said locator agent unit is realized by a network service.
- 14. The Locator Agent Unit according to claim 12, wherein said network service is realized by an Internet service.
- 15. A Locator Device for coordinating location dependent information, services, and tasks, providing location measurements and proximity observations of a user, wherein said locator device provides a network interface to a locator agent unit's investigation means for identifying

- and coordinating location information sources or inquirers' and other parties' clients.
- 16.A Locator Client Device for exchanging location dependent information or coordinating location dependent services or tasks by comprising communication means for communicating requests and location dependent information wherein said locator client device comprises a network interface to a locator agent unit's investigation means for identifying and coordinating location information sources or inquirers' and other parties' clients.
- 17.A Distributed Locator System for providing coordinated location information dependent information, services, or tasks, comprising a network and locator agent units providing a uniform location information interface, wherein a personalized locator agent unit is located in the distributed locator system dependent on said location information.
- 18.A Computer Software Product for coordinating location dependent information, services, and tasks comprising computer program means for performing the method according to claim 1.